

CLEAN COPY OF CLAIMS

Claims 1-3 (Canceled)

Claim 4. A method for treatment of pythiosis or against pythiosis in a mammal which prophylaxis comprises:

- (a) providing an injectable vaccine which comprises in a sterile aqueous solution in admixture:
 - (i) intracellular cytoplasmic antigens separated from disrupted cells *Pythium insidiosum* by SDS-PAGE; and
 - (ii) extracellular antigens secreted into a medium for growing the cells of *Pythium insidiosum* wherein the mixture comprises 28, 30 and 32 kDa antigens as determined by SDS-PAGE; and
- (b) vaccinating the mammal with the vaccine.

Claim 5. The method of Claim 4 wherein the antigens have been provided by

- (a) growing cells of the *Pythium insidiosum* in a culture medium and then
 - (i) killing the cells;
 - (ii) separating the killed cells from the culture medium so as to produce a first supernatant comprising the extracellular antigens secreted into the medium; and
 - (iii) disrupting the cells water to provide the intracellular cytoplasmic antigens in a second supernatant which is separated from the disrupted cells; and

(b) separating the extracellular antigens from the first supernatant.

Claim 6. The method of Claim 4 wherein the cells have been disrupted by sonication.

Claim 7. The method of Claim wherein the *Pythium insidiosum* is deposited as ATCC 74446.

Claim 8. The method of any one of Claims 5, 6, or 7 wherein the culture medium is Sabouraud dextrose broth.

Claim 9. The method of Claim 5 wherein the cells are killed with thimersol.

Claim 10. The method of Claim 5 wherein disrupted cells are separated from the culture medium for the cells by centrifugation.

Claim 11. The method of Claim 5 wherein the intracellular cytoplasmic antigens in the second supernatant and the extracellular antigens in the first supernatant are mixed to provide a mixture of antigens, precipitating the mixture of antigens with acetone to provide a precipitate, dissolving the precipitate in sterile distilled water to provide a solution of the antigens, and dialyzing the solution of antigens in sterile distilled water to remove low molecular weight components less than 10,000 MW to provide the vaccine.

Claim 12. The method of Claim 4 wherein the mammal after vaccination is monitored for a change in a Th1 response and a Th2 response, wherein an increase in Th1 response and a decrease in the Th2 indicates that the mammal has developed the Th1 response to the vaccine.

Claims 13-32 (Canceled)